METACORE QUICK REFERENCE GUIDE

USER DATA

NETWORKS

- Up-regulated (+)
  Object has user data with positive value
- Down-regulated (-)
  Object has user data with negative value
- Mixed-signal (+ /-)
  Object has user data with both positive and negative values
- Gene variants
  Object has user data with gene variants
- Mixed data
  Object has user data with both expression values and gene variants

MAPS

NETWORK OBJECTS

ENZYMES

- Generic enzyme

KINASE
- Generic kinase
- Protein kinase
- Lipid kinase

PHOSPHATASE
- Generic phosphatase
- Protein phosphatase
- Lipid phosphatase

PHOSPHOLIPASE
- Generic phospholipase

PROTEASE
- Generic protease
- Metalloprotease

GTPASE
- G-alpha
- RAS - superfamily

GENERIC CLASSES

- Receptor ligand
- Transcription factor
- Protein
- Compound
- Predicted metabolite or user's structure
- Inorganic ion
- Reaction
- DNA
- RNA
- Generic binding protein
- Cell membrane glycoprotein

CHANNELS/TRANSPORTERS

- Generic channel
- Ligand-gated ion channel
- Voltage-gated ion channel
- Transporter

RECEPTORS

- Generic Receptor
- GPCR
- Receptors with kinase activity

G PROTEIN ADAPTOR/REGULATORS

- G beta/gamma
- Regulators (GDI, GAP, GET, etc.)

GROUPS OF OBJECTS

- A complex or a group
  Proteins physically connected into a complex or related as a family
- Logical association
  Proteins linked by logical relations or physical interactions
- Custom association
  Group of collapsed objects chosen by user

Group1

INTERACTIONS BETWEEN OBJECTS

EFFECTS

- Positive / activation
- Negative / inhibition
- Unspecified

MECHANISMS

PHYSICAL INTERACTIONS

- B — Binding
  Physical interaction between molecules
- C — Cleavage
  Cleavage of a protein at a specific site yielding distinctive peptide fragments. Proteolytic cleavage can be carried out by both enzymes and compounds
- CM — Covalent modifications
  Covalent binding of a small chemical groups to protein amino acids or DNA/RNA nucleotides.
- +P — Phosphorylation
  Protein activity is altered via addition of a phosphate group
- - P — Dephosphorylation
  Protein activity is altered via removal of a phosphate group
- T — Transformation
  Protein activity regulation by binding & hydrolysis of GTP
- Tn — Transport
  Transport of a protein or a compound between organelles
- Z — Catalysis
  Catalysis of an enzymatic reaction
- Tr — Transcription regulation
  Physical binding of a transcription factor to target gene's promoter
- cRT — Co-regulation of transcription
  Influences on gene expression by direct binding with transcription machinery or by chromatin remodelling
- Rg — Regulation
  Influence on the biochemical reaction by changing its composition
- M — MicroRNA binding
  Regulation of gene expression by binding of microRNA to target mRNA

FUNCTIONAL INTERACTIONS

- IE — Influence on expression
  Indirect influence of chemical compound or protein on the amount of another protein
- Cn — Competition
  When two molecules compete for the interaction with the third molecule
- ? — Unspecified interactions
  Influence on activity of protein or RNA without determined mechanism
- PE — Drug-Drug interactions. Pharmacological effect
  Drugs change pharmacological effects of other drugs, for instance by competing for drug metabolism enzymes or organic transporters
- TE — Drug-Drug interactions. Toxic effect
  Drugs change toxic effects of other drugs, for instance by competing for drug metabolism enzymes or organic transporters

LOGICAL RELATIONS

- GR — Group relation
  Object belongs to a generic group of related objects
- CS — Complex subunit
  Protein is a subunit of a protein complex
- SR — Similarity relation
  Chemically similar compounds with chosen Tanimoto similarity score

LINKS ON NETWORKS

- Incoming interaction
  When the mouse is over object yellow link indicates direction to object
- Outgoing interaction
  Cyan link indicates direction FROM the object

INTERACTIONS FROM CUSTOM LIST (MetaLink™)

- Interaction is in the network
  Interaction is represented by a thin solid line and is highlighted in blue
- Interaction is in the base, but not in network
  Interaction is highlighted in yellow
- Interaction is in the network
  Interaction is highlighted in magenta

CANONICAL PATHWAYS

- Canonical pathway
  The link is highlighted in a thick cyan or magenta line

LINKS ON MAPS

- Disrupts in disease
- Weakens in disease
- Emerges in disease
- Enhances in disease
- Species specific interactions

OBJECTS ON MAPS

LOCALIZATION

- Mitochondria
- EPR
- Golgi
- Nucleus
- Lysosome
- Peroxisome
- Cytoplasm
- Extracellular

OTHER MAP OBJECTS

Comments
- Note
- Normal process
- Pathological process

Blocks
- Normal process
- Pathological process

- Species specific object
- Path start

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